APPLICANT(S): HAJ-YEHIA, Abdullah

SERIAL NO.: FILED:

09/856,616 July 31, 2001

Page 2

Claim 1 (Previously presented): A scavenger compound of the general formula I

$$X - R_1 - R_3 - R_2 - Z$$

wherein

X is a 4 - 10 membered ring;

R₁ and R₂ are independently of each other an alkylene or alkenylene wherein said R₁, R₂ or both may be unsubstituted or substituted by substituents selected from the group consisting of pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, pyrrolidinyl, pyrrolinyl, imidazolidinyl, imidazolinyl, pyrazolidinyl, pyridyl, pyrazinyl, pyridazinyl, indolyl, oxyindolyl, isoindolyl, indazolyl, indolinyl, 7-azaindolyl, isoindazolyl, quinolyl, isoquinolyl, naphthridinyl, cinnolinyl, quinazolinyl, pyridopyridyl, benzoxazinyl, quinoxadinyl, and carbolinyl;

R₃ is carboxy, amido, alkanol, amino, carboxyalcohol, alkanediol, amine alcohol, amine diol, thio or amine carbonyl;

n and n' are, independently, an integer from 0 to 8; D is CH₂ or NH; and Z is a 4-10 membered di sulfide ring or R₄ and its salts.

Claim 2 (Previously presented) A compound according to claim 1 wherein X is a 4, 5 or 6 membered ring and Z is a 4, 5 or 6 membered di sulfide ring or R_4 .

Claim 3 (Previously presented) A compound according to claim 1 wherein R_1 and R_2 are a C_{1-10} alkylene or alkenylene.

APPLICANT(S): HAJ-YEHIA, Abdullah

SERIAL NO.: 09/856,616 FILED: July 31, 2001

Page 3

Claims 4-5 (Canceled)

Claim 6 (Original) A method for the preparation of a compound according to claim 1 comprising the step of performing reduction or oxidation of a compound of the general formula II

$$X$$
 R_1
 H

and a compound of the general formula III

$$R_2-Z$$

in the presence of a reducing or oxidizing agent and a solvent.

Claim 7 (Original) A method of treating a patient afflicted with conditions associated with oxidative stress or free radical injury comprising the step of administering to the patient an effective amount of the compound according to claim 1.

Claim 8 (Original) A method according to claim 7 wherein with conditions associated with oxidative stress or free radical injury are selected from aging-mediated changes, pulmonary and ocular hypertension, asthma and other related respiratory diseases, trauma, neurotoxicity, neurological and neurodegenerative disorders, AIDS-related disorders, disorders of gastric acid and other secretary and peristaltic functions of the alimentary system, inflammatory bowel diseases (Crohn's disease and ulcerative colitis), drug and disease-induced neuropathy and nephropathy, pathological and premature uterine contractions, chemotactic, phagocytic and other cellular defense impairment in immunological disorders, aggregation disorders, pregnancy-induced hypertension, cerebrovascular diseases, and male impotence.

ST AVAILABLE COF

APPLICANT(S): HAJ-YEHIA, Abdullah

SERIAL NO.:

09/856,616

Page 4

I

July 31, 2001 FILED:

Claim 9 (Original) A method according to claim 7 wherein the compound is administered orally.

Claim 10 (Original) A pharmaceutical composition comprising the compound according to claim 1 together with a pharmaceutically acceptable excipient.

Claims 11-12 (Canceled)

Claim 13 (Previously presented): A scavenger compound of the general formula

 $-R_1 - R_3 - R_2 - Z$

wherein

X is a 4 - 10 membered ring;

R₁ and R₂ are independently of each other an alkylene or alkenylene wherein said R₁, R₂ or both may be unsubstituted or substituted by substituents selected from the group consisting of pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, pyrrolidinyl, pyrrolinyl, imidazolidinyl, imidazolinyl, pyrazolidinyl, pyridyl, pyrazinyl, pyridazinyl, indolyl, oxyindolyl, isoindolyl, indazolyl, indolinyl, 7-azaindolyl, isoindazolyl, quinolyl, isoquinolyl, naphthridinyl, cinnolinyl, quinazolinyl, pyridopyridyl, benzoxazinyl, quinoxadinyl, and carbolinyl;

R₃ is alkanol, amino, carboxyalcohol, alkanediol, amine alcohol, amine diol, thio or amine carbonyl;

$$\begin{array}{c|c} & PO_3H_2\\ \hline & -(CH_2)_{n^-}D - PO_3H_2\\ \hline \\ R_4 \text{ is null, H or} \end{array};$$

n and n' are, independently, an integer from 0 to 8;

D is CH2 or NH; and

Z is a 4 - 10 membered di sulfide ring or R_4 and its salts.